World Chronicle

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UN Conference on Disarmament

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DISARMAMENT

About 3,100 tons of plutonium and highly enriched uranium are now stockpiled in various civil and military programmes around the world. These huge inventories pose a variety of risks and because it takes only a few kilograms of fissile material to make a nuclear explosive, those risks are not always directly proportional to the amount of fissile material each country has in stock. In today's edition of **World Chronicle**, Mark Moher, former President of the United Nations Committee on Fissile Materials, discusses the risks posed by these dangerous materials and what the United Nations system is doing to prevent a major disaster from happening.

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ANNOUNCER: From United Nations Headquarters in New York, this is **World Chronicle**, an unedited interview programme about major global issues.

Here now to introduce our guest is the host of today's **World Chronicle**.

LITTLEJOHNS: I'm Michael Littlejohns, and this is **World Chronicle**.

Nuclear weapons are arguably humankind's greatest threat. Many attempts have been made in the past fifty years to prevent the development and proliferation of such weapons. The latest of these is to consider the possibility of banning the production of bomb-making material used to manufacture these Armageddon-type weapons. But how successful have these attempts been? And can there be any hope of convincing countries not to become part of the nuclear weapons club?

Our guest today is the 1998 Chairman of the United Nations Committee on Fissile Materials. He is Mark Moher, Canadian Ambassador to the UN Conference on Disarmament. Joining me to talk with Ambassador Moher is Bhaska: Menon of *Disarmament Times* and James Wurst of *In These Times*.

Ambassador Moher, welcome to **World Chronicle.**

MOHER: Thank you.

LITTLEJOHNS: Ambassador, your country, Canada ,has been in the forefront in disarmament matters for a very long time and I am sure that in your current position – you're one of the leaders in what we have been talking about – trying to bring about the banning of the production of bomb-making material how successful have the efforts of Canada and like-minded countries been in this regard and what do you feel are the chances of doing something really meaningful in the next year or two?

MOHER: Well, thank you for the compliments to Canada. You are right. I am the latest in a long line of Canadian ambassadors who have been tasked with trying to move this file forward. I think the current status is that after four decades of advocating progress on this theme, we are now finally launched into a mechanism, a committee tasked with negotiating a treaty. It would be a very complex, very difficult negotiation, politically and technically, and the challenges ahead are really very formidable. But the

greatest positive feature is that we finally have got ourselves launched into the process of actual negotiations.

LITTLEJOHNS: Where is most of the opposition coming from?

MOHER: Well, it 's really centred around the definition of the mandate, if I can put it that way. First of all, there is the concern over whether pre-produced or stocks of material are to be included in the negotiation or not. There are a large number of countries who feel that stocks should be included in the negotiations. The five nuclear weapons states....

LITTLEJOHNS: Five acknowledged ones. Well, of course there are two others who were acknowledged simply by their tests.

MOHER: The five nuclear weapon states defined by the Non-Proliferation Treaty – the United States, Russian Federation, China, United Kingdom, France – have taken a very clear position that stocks will not be included.

MENON: Before we go into the technicalities of it, could we just explore the reason why States want nuclear weapons at all? During the Cold War there was an ideological face-off between two opposing systems. Perhaps you could understand it in that context. But after the Cold War is over, when there is political convergence, when everyone claims to be or wants to be a democracy, why do people need nuclear weapons?

MOHER: Well, I think you can speak to a number of countries and get different answers to that. Basically, it boils down to their perception of their security environment, their security needs. I think one of the most encouraging things that has emerged after the end of the Cold War has been a recognition that the insanity that lead to 70,000 nuclear weapons having been manufactured by 1986 really should come to an end and that the commitments that have been made off and on over the years to actually disarm, to move towards the elimination of nuclear weapons ...

MENON: The numbers have been eliminated, right? A number of nuclear weapons ....

MOHER: Through the START process, significant reductions have been made and are continuing.

MENON: And how many nuclear weapons are there now in the world?

MOHER: To tell you the truth I don't know. The START II limit, which we hope will be ratified soon, says that the United States and Russian Federation will bring their stockpiles down to 3,000 to 3,500 each. The British, French and Chinese have in the neighbourhood of 2 to 400 nuclear weapons each. This does not count the tactical nuclear weapons that the Russians and Americans have. So the significant thing is that we have come from, let's say, 70,000 nuclear weapons in 1986 probably down to the range of 30 to 35,000 now and the idea is to keep going in that direction.

MENON: So when you talk about fissile stocks all this disarmed nuclear weaponry turns into fissile stocks. All that ...

MOHER: All of the plutonium and highly enriched uranium which was used in warhead goes into a stockpile and then sits there. No one has official official statistics but the calculations are that there's about 250 metric tons of plutonium and about 1,700 metric tons of highly enriched uranium. That's a very large amount of material and the material itself is difficult to manage and store.

MENON: And who has it?

MOHER: Most of the material, by far the majority of the materials, are in the hands of the United States and the Russian Federation. Smaller quantities are with the other three nuclear weapon states and then, of course, there are the threshold, the so-called threshold states – India, Pakistan, Israel.

MENON: And this is not covered by the stocks – by the fissile stocks? The stocks will not be touched?

MOHER: The debate, which has not yet been resolved, continues in the context of the negotiations. There are those who argue that an effective treaty must include stocks and measures to deal with those stocks. There are other states who argue "no, we are talking about new or future production. We are not going to put our stocks on the table." That debate continues and it is a very difficult debate.

WURST: I would like to take that point where you're talking about number of warheads are decreasing and the stocks. Why is it important to negotiate on these bomb-

making materials when the issue would appear to be the weapons themselves? Why is there a ban on this fissionable materials an issue? Why should we be concerned with that?

MOHER: I think the key is that the concept of a fissile material cut-off treaty – an end of production – has been around for a long, long time and it gets re-defined in different time periods, in different contexts. The way those who favour the treaty now regard it is that it is another incremental step in narrowing and foreclosing nuclear weapons programmes in the future. If you are able, for example, to negotiate a treaty which says that no country will ever again produce new material for weapons, you have put a lid on the problem. Now the containers – though quite a large container, that's the stocks problem – but at least you have put the lid on so that if the world becomes a more uncomfortable place in the future and people decide that maybe they should start thinking about going back up the weapons slope, you've got this lid. But then you've got that problem if you don't include stocks. Then one of them, your mandate talks about a non-discriminatory treaty so if you don't deal with stocks that means whoever has stocks, they can't produce anything new. But they already have what's already in their stockpile so that they already have a step or two of fourteen steps ahead of anybody else if there is a need to go – if there is need to produce some more. Therefore it is a moot point whether you have a treaty or not.

Well, I think a little bit of this is like the debate that takes place in the nuclear disarmament field generally. Why do this step by step business? Why not just negotiate a treaty today that says "no nuclear weapons"? And there are people who believe very strongly on that as a way of doing business. Canada, for which I can speak, feels that the only realistic, viable way of going forward is step by step. So you negotiate the Non-Proliferation Treaty, you negotiate the Comprehensive Nuclear Test Ban Treaty, now we want to negotiate a Fissile Material Cut-off Treaty. Our feeling is that by going at it in that way, in parallel with the START process which involves the Russians and the Americans bilaterally, that by working down these two multilateral and bilateral tracks that you are gradually going to bring the numbers down and reduce the possibilities of new problems in the future. The problem with fissile material stocks is a very real one. The fundamental

political question is, can we agree to negotiate stops in these negotiations? The answer to that, so far, has been that those countries who have them will not agree. So the question is, okay, should we then negotiate and at least stop new production and then see in parallel, in other ways, whether we can deal with the stocks question. It's not a question of ignoring stocks, it's a question of how do you deal with stocks.

MENON: Among the nuclear weapon states, the five declared and accepted nuclear weapons states, who actually is producing fissile material right now?

MOHER: The general understanding right now is that all five of the NPT nuclear weapon states, if I can call them that, have ceased their production process.

MENON: Have ceased production?

MOHER: Have ceased production.

MENON: So in a sense, any treaty that would emerge from the talk would be entirely a non-proliferation matter, not a disarmament measure. In other words it would prevent non-nuclear weapon states from producing any more fissile material.

MOHER: Well, I think the idea is that the Treaty should have both a disarmament dimension and a non-proliferation dimension. With the nuclear weapon states, it would confirm, lock-in, treaty language verified by the international community that they will not produce new material. It would say to other states, such as the so-called threshold states – India, Pakistan, Israel – that they would agree to cease producing material subject to international verification and therefore would have a non-proliferation dimension. And as I said, very clearly, one way or the other, we will continue to try get to the stocks problem, which is common to both.

MENON: What's the situation of Japan here, because a couple of years ago there was a massive transport of fissile material into Japan. Is that a significant repository of fissile material?

MOHER: Well, I think the key thing to remember here is that we are trying to deal with weapons usable material – plutonium and highly enriched uranium being the two primary materials. The plutonium is a product of the nuclear fuel cycle and there are countries, like Japan, who have in their civilian programmes, programmes designed to use

plutonium for peaceful purposes, for power purposes. That material is produced and used under Japan's political and treaty commitments to non-proliferation, not to use them in weapons ,and secondly, is subject to international inspections by the International Atomic Energy Agency in Vienna. So when you talk about Japan having fissile material, yes, Japan has fissile material but it is material which is covered by treaty obligations and international inspections ...

MENON: But it wasn't a big deal in that sense?

MOHER: It has, it has – the material – yes.

LITTLEJOHNS: This is **World Chronicle.** Our guest is Mark Moher, Canadian Ambassador to the UN Conference on Disarmament. Ambassador Moher, you spoke a few minutes ago about 70,000 nuclear warheads. How many of these were actually in a state of deployment so that a whole world could have been blown up in very short notice?

MOHER: Well, very large numbers. There is not total transparency in terms of weapons and deployment. The numbers that I quoted are numbers from civilian experts who have done their studies. Their studies indicated that in 1986, as I mentioned, there were about 70,000 nuclear weapons. Some of those would have been deployed, some of those would have been in reserve, some of those would have been in storage, some of those would have been in the process of dismantlement. So it's a sliding scale that it's difficult to ....

LITTLEJOHNS: How great is the risk of these things falling into the hands of, for example, terrorists.

MOHER: Well, that's always been a concern and certainly there's a lot of time and effort being directed to prevent that from happening. I think the situation is that in most of the nuclear weapon states – the United States, Britain, France, China – they are very well protected and there's a general feeling that there's no great concern, although the levels of physical protection are maintained at a very high level.

LITTLEJOHNS: But you don't mention Russia?

MOHER: The Russian Federation continues to be the source of concern that with the economic and political circumstances in the Russian Federation, with the very

large quantities of weapons and of material which is in that country that...

LITTLEJOHNS: And in the other former Soviet States, especially.

MOHER: Most of it has been repatriated now to the Russian Federation. But there is a very real concern about weapons, very real concern about fissile material and a very real concern about brains and, certainly, the United States government for example has been involved in some very large programmes. They just announced, for example, the nuclear cities initiative which is designed to ensure that in the nuclear production centres of the Russian programme, that people who used to be engaged in weapons programmes are engaged in other activities and, therefore, are not tempted to sell their expertise elsewhere.

WURST: As you mentioned the recognized Five are not producing but how does it complicate matters with India, Pakistan and Israel, because as I understand it, these three are producing fissile materials and, of course, less than a year ago, India and Pakistan tested. How does this complicate your negotiations?

MOHER: Well, I think the approach to any negotiations is, if we can agree that we are dealing with future production only, then you just sit down and you negotiate and then as of the day that you have agreed on a treaty, production everywhere stops. So, in a sense, you can negotiate while production continues in any country. Politically, however, it is a real problem and worries people. We, for example Canada, have been calling on all states to declare a moratorium now. We stop producing now and we will negotiate this treaty, but we're not gong to keep producing right up until the last day of the negotiation. The problem there is that we have not been able to convince the Five and the Three to agree to a formal declaration of such a moratorium.

MENON: Does Canada itself produce fissile material? You have nuclear...

MOHER: We have a nuclear power programme, a nuclear industry. We irradiate fuel and reactors, we have spent fuel. We do not have a reprocessing programme, we do not have separated plutonium in the Canadian fuel site.

MENON: So what happens to your stocks of spent fuel?

MOHER: They are kept in storage now, but they are not reprocessed.

LITTLEJOHNS: Ambassador Moher, what is the lifetime of this material? Surely, it's going to be extremely difficult to ....

MOHER: Thousands of years.

LITTLEJOHNS: Thousands of years – so what are you going to do with it?

MOHER: Well, the idea with plutonium and highly enriched uranium is, ideally, there are two ways of going. One is, you engage in long-term disposal and this is where the research programmes have been done in Canada and elsewhere about embedding it in glass or in other kinds of containers and then putting it in very deep, geologically stable ...

LITTLEJOHNS: In the diamond mines in South Africa or something like that.

MOHER: ... or, you know, deep in the Canadian shield or wherever. So that's one. Long-term disposal, monitored, but obviously for a very long period of time. The other option is the burn-up option where you recycle the plutonium and highly enriched uranium, burn it in a nuclear power reactor so that you use up the material in that way. There is a lot of work being done in that area, but the economics and technical and political problems are considerable.

MENON: So what would political fault lines in the negotiations on fissile materials – who is on what side?

MOHER: Well, I think you pick your issue and then you get different fault lines. I think on the key issue of stocks, the basic issue is the five nuclear weapon states and the so-called three threshold states versus a very large number of other states in the Conference.

MENON: But isn't Pakistan very much on the side of wanting stocks, included?

MOHER: Pakistan's current position is that they want stocks to be included so that the symmetry between India and Pakistan can be negotiated. That is their current position. I think if you look at their stated position on security policy grounds – we need nuclear weapons because India has nuclear weapons, we need nuclear stocks because India has nuclear stocks – I think in the final analysis, their position would be defined by that analysis.

MENON: But would the Treaty cover the distribution of existing stocks? Would it actually lock stocks in place or would it deny the ....

MOHER: I think that's another one of the many issues that we are going to have to deal with. Do you say to the nuclear weapons states, as a ground zero for this treaty, we must know what you have and where it is, and then we'll worry about future production? Will they do that? Will they agree to that? That's one of the things that we have to see whether we can negotiate an answer.

WURST: When the Nuclear Non-Proliferation Treaty was extended in 1995 there was an agreement that there would be a certain number of issues – nuclear disarmament issues – that would be dealt with by the time the treaty was reviewed again meaning next year – the year 2000. The Comprehensive Test Ban was one of them. The Treaty exists now. The other one was the Fissile Material Ban. If you don't make any progress within the next year, what effect do you think that will have in the NPT?

MOHER: Well, I think that's a very complex question. I think the nuclear work plan that was agreed in the 1995 Conference had three basic dimensions – CTBT, Fissile Material and continuing nuclear disarmament by the nuclear weapons states. The record is mixed. We have the CTBT Treaty, we don't have it ratified. The Comprehensive Test Ban Treaty, we have the Treaty. We do not have it ratified by the states necessary to bring it into force. So we have half a success. On fissile material, I think it is encouraging, as I said at the opening of the programme, that we have agreed to start the process. It will be a long, tough negotiation but I think the fact that it is underway, would be regarded as a positive. Nuclear disarmament, very good progress was being made in the START exercise, and START I moving to START II. The problem is, we don't have START II ratified so again the report card would be mixed. There is a serious concern that the Nuclear Non-Proliferation Treaty which is **the** foundation of both nuclear disarmament and nuclear non-proliferation efforts, with 187 countries in the world parties to it – only 4 countries aren't – is right now under serious challenge both because of the India-Pakistan testing in May of this year, last year, 1998, and because a number of these other things received mixed report cards.

MENON: One of the interesting things over the last year has been the split in NATO. The allies of the nuclear weapons states, the Western nuclear weapon states, seem to have deserted them especially in forums like the United Nations. Do you see this as a continuing trend?

MOHER: I don't think I would agree entirely with the analysis, if I can start from that. NATO has always been an alliance within which a debate has taken place on strategic and other issues. I mean that's very clear, going back to the whole history of the alliance. There is obviously a difference of opinion within NATO over how far, how fast, what are the next steps in the nuclear disarmament game. But there is also some very fundamental understandings -- NATO does have a common nuclear deterrent policy. Canada, as a member of NATO, adheres to that. That's not a debate. The question is: how many weapons, what other things ...

MENON: Is Canada sympathetic to the proposal for a new agenda for nuclear disarmament when the nuclear weapon states were bitterly opposed to it?

MOHER: That is part of the political debate. But there is nothing in the new agenda resolution which is a challenge to the core elements of NATO doctrine . And Canada as a country which supports it, while we abstained on the resolution but supported the process, does believe very strongly that nuclear disarmament and nuclear non-proliferation efforts should be continued with the highest priority. We are not happy with the current pace. We are not happy that six-seven years after START II is signed, it's still not ratified.

LITTLEJOHNS: Ambassador Moher, we have to conclude our debate, that's all the time we have. Thank you for being with us on this edition of **World Chronicle.** Our guest has been Mark Moher, Canadian Ambassador to the UN Conference on Disarmament. He was interviewed by Bhaskar Menon of *Disarmament Times* and James Wurst of *In These Times*. I'm Michael Littlejohns. Thank you for joining us. We invite you to be with us for the next edition of **World Chronicle.**